



Mr. Roger Papler
Engineering Geologist
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612

ARCADIS U.S., Inc.
2000 Powell Street
Suite 700
Emeryville
California 94608
Tel 510 652 4500
Fax 510 652 4906
www.arcadis-us.com

ENVIRONMENT

Subject:

Work Plan Addendum for Vapor Intrusion Evaluation of Residential Buildings in the Expanded Off-Property Study Area, 1300 Terra Bella Avenue and 1250 Middlefield Road, Mountain View, California

Dear Mr. Papler:

Date:

November 6, 2014

Contact:

Erica Kalve, P.G.

Phone:

415.491.4530 ext. 22

Email:

Erica.Kalve@arcadis-us.com

Our ref:

EM001727.0070

This letter serves as a Work Plan Addendum to the September 24, 2010 "Work Plan to Evaluate Potential Vapor Intrusion in the Off-Property Study Area and at 1250 West Middlefield Road" for the former Teledyne Semiconductor and former Spectra-Physics, Inc. Lasers Sites ("2010 Work Plan"; ARCADIS U.S., Inc. [ARCADIS] 2010) and as a follow-up to the February 7, 2014 "Work Plan Addendum for Vapor Intrusion Evaluation of Residential Buildings in the Off-Property Study Area, 1300 Terra Bella Avenue and 1250 Middlefield Road, Mountain View, California" ("2014 Residential Addendum"; ARCADIS 2014a). ARCADIS the 2010 Work Plan, the 2014 Residential Addendum, and this Work Plan Addendum on behalf of TDY Industries, LLC for the former Teledyne Semiconductor Site and Thermo Fisher Scientific Inc. for the former Spectra-Physics Lasers Site, located respectively at 1300 Terra Bella Avenue and 1250 West Middlefield Road, Mountain View, California (Figure 1). TDY Industries, LLC and Thermo Fisher Scientific Inc. are collectively referred to as "the Companies." The scope of work contained in this Work Plan Addendum applies to nine residential buildings in the Spring Street Area (SSA) and one residential building in the North Bayshore Area (NBA) as outlined on Figure 2.

This Work Plan Addendum was prepared in accordance with the United States Environmental Protection Agency (USEPA) letter titled "EPA Region 9 Guidelines and Supplemental Information Needed for Vapor Intrusion Evaluations at the South Bay National Priorities List (NPL) Sites," dated December 3, 2013 ("EPA Region 9 Guidelines"; USEPA 2013), which requires additional sampling to evaluate potential vapor intrusion in residential buildings outside of the original vapor intrusion study area (Figure 2 of the 2014 Residential Addendum) during colder weather months (November through February).

Imagine the result

Updated Roles and Responsibilities

The 2010 Work Plan outlined the project team's roles and responsibilities, including Regional Water Quality Control Board (RWQCB) and USEPA Region 9 Superfund Division oversight. The only change to the personnel listed in the 2010 Work Plan is the replacement of the USEPA project manager to Ms. Melanie Morash. Ms. Morash will be the USEPA's technical lead for implementation of the work detailed in this Work Plan Addendum.

Data Evaluation Updates

Data evaluation and reporting methods will be conducted as described in the 2010 Work Plan (ARCADIS 2010) with incorporation of the following revisions. Sample results will be assessed using an updated tiered approach, as defined below:

- Tier 1: Indoor air sample results will be compared to outdoor air sample results to evaluate whether indoor air quality may be affected by sources unassociated with vapor intrusion.
- Tier 2: Indoor air sample results will be compared to long-term screening criteria and site-specific exposure scenarios (regional screening levels [RSLs]; USEPA 2014a).
- Tier 3: Indoor air sample results will be compared to short-term screening criteria (Agency for Toxic Substances and Disease Registry [ATSDR] Minimal Risk Levels [MRLs] and EPA Region 9 Guidelines; ATSDR 2013; USEPA 2014b).

Previous Sampling Results

Outreach and evaluation of the 32 residential buildings in the original study area is generally complete with the exception of a third round of sampling at SSRB-16, which will be conducted during the 2014-2015 winter season.

Remediation Status

In 2005, an enhanced reductive dechlorination (ERD) pilot study was conducted and demonstrated the effectiveness of in situ bioremediation to treat concentrations of volatile organic compounds (VOCs) in saturated soils and shallow and intermediate zone groundwater. The results of the pilot study were used to develop a full-scale ERD treatability study for which the initial injections were performed during 2011 and 2012. The treatability study injections induced strongly reducing conditions and resulted in a

very effective reduction of VOC concentrations in saturated soils and groundwater (ARCADIS 2013).

In addition to the reduction in groundwater concentrations observed on site, groundwater concentrations underlying residential buildings in the SSA have also decreased. Figure 3 illustrates the trichloroethene (TCE) distribution in shallow groundwater based on pre- and post-ERD groundwater monitoring results. As shown on Figure 3, there have been significant reductions in TCE in groundwater due to the ERD treatment. These significant reductions in TCE concentrations in groundwater are expected to result in corresponding reductions in VOC concentrations in soil vapor, thus resulting in reduced vapor intrusion potential over time.

Purpose of Additional Residential Addendum

The primary purpose of this Work Plan Addendum is to expand the residential vapor intrusion investigation study area and sampling program to include all residential buildings that overlie the November 2013 interpretation of the 5 micrograms per liter ($\mu\text{g/L}$) TCE isoconcentration contour, as presented on Figure 2 and Figure 4. The extent of the 5 $\mu\text{g/L}$ TCE contour has significantly decreased (as presented on Figure 3) as a result of the ERD and is expected to continue to decrease in the coming years.

Sampling Plan Updates

Field analytical methods, sample documentation, and quality assurance methods will be conducted as described in the 2010 Work Plan with the incorporation of the following revisions (ARCADIS 2010).

Pre-Sampling Activities

USEPA and ARCADIS will jointly lead a public outreach session to inform residents in the expanded study area of the vapor intrusion investigation and request their participation in the indoor air study. Access agreements will be distributed at this time and must be signed by residents opting to participate in the study. In the case that the residential building is occupied by a tenant, access must be granted by both the owner and the tenant.

Once access has been granted, a pre-sampling inspection and interview will be conducted for each residential building. The inspection will be conducted to evaluate appropriate living area and crawl space sample locations. The home will also be inspected for potential vapor intrusion pathways and design elements that may

increase the potential for vapor intrusion into the building. An interview will be conducted with the resident to obtain historical and operational information on the building, as well as to identify factors or consumer products in the residence that may influence indoor air quality. Some significant VOC effects on indoor air quality may come from the use of consumer products, building materials, and personal activities. Residents will be asked not to bring home any dry cleaned items directly prior and during the duration of sampling, and will also be asked to remove any consumer products that are recognizable sources of constituents of concern (COCs) from the house. The building survey forms obtained for use in this study were provided as Appendices L and M of the Department of Toxic Substances Control (DTSC) Vapor Intrusion Guidance Document (DTSC 2011) and are included as Attachment B of this Work Plan Addendum.

Sampling Methods

Air samples for VOC analysis will be collected using Radiello RAD-130 long-term (approximately 14-day) passive sorbent samplers. RAD-130 samplers will be used to sample all site COCs, with the exception of Freon 113. During past residential indoor air sampling efforts, Freon 113 was detected at a maximum concentration approximately 25,000 times less than the RSL. Thus, Freon 113 does not significantly contribute to human health risk at the Site and additional evaluation of Freon 113 is not needed.

Each COC sampled using the RAD-130 will have a reporting limit less than its minimum screening level based on a 14-day sample duration, with the exception of vinyl chloride. The estimated reporting limit for a 14-day sample of vinyl chloride is 0.19 microgram per cubic meter ($\mu\text{g}/\text{m}^3$), which slightly exceeds the RSL of 0.17 $\mu\text{g}/\text{m}^3$. Based on previous indoor air sampling results collected in the area, vinyl chloride concentrations have not been detected at levels of concern and, therefore, this limitation of the RAD-130 is acceptable for the purpose of this indoor air study.

Due to its physical properties, vinyl chloride is likely to back diffuse using RAD-130 samplers, thus sampling results may underestimate air concentrations. Because cis-1,2-dichloroethene (cis-1,2-DCE) is a breakdown product resulting from TCE dechlorination in underlying groundwater, it can indicate: (1) vapor intrusion from underlying groundwater, and (2) the potential presence of vinyl chloride (an additional reductive dechlorination breakdown product). Therefore, if significant concentrations of cis-1,2-DCE are detected, confirmation sampling using Summa canisters (Method TO-15 analysis) will be conducted.

Two rounds of sampling will be conducted at each residence participating in the study. The first round of sampling will be conducted during colder weather months (November through February).

Samples will be transferred under strict chain-of-custody procedures to a California-certified laboratory and analyzed for VOCs using modified USEPA Method TO-17.

Response Actions

Indoor air sampling results will be assessed using a tiered approach, as described above (see Data Evaluation Updates section). Figure 5 illustrates the data evaluation and response action process. As shown, response actions will be implemented, as follows:

- If indoor air concentrations from both rounds of sampling do not exceed Tier 1 or Tier 2 criteria, no further action will be necessary.
- If indoor air concentrations exceed Tier 2 criteria, results will be reported to the USEPA and RWQCB within 48 hours of receipt of the data. If concentrations are suspected to be from secondary sources (such as dry cleaned items, household cleaners, or other consumer products), additional sampling may be conducted with a photoionization detector (PID) and/or a portable gas chromatograph/mass spectrometer ("screening tools"). These screening tools are intended to be used for instantaneous estimates (grab samples) of indoor air concentrations, and information collected during the screening assessment should not be directly compared to exposure screening criteria. If secondary sources are identified, they will be removed from the residence and an additional round of passive indoor air sampling will be conducted using the Radiello RAD-130 sampler as described above. Note that if additional sampling is deemed necessary, it will be conducted on an expedited schedule.
- If indoor air concentrations exceed Tier 2 criteria and are suspected to be a result of vapor intrusion or if indoor air concentrations exceed Tier 3 criteria, then a vapor intrusion mitigation system will be installed, as described in the "Vapor Intrusion Mitigation Fact Sheet" (Attachment A; ARCADIS 2014b), providing access is granted. After installation of the mitigation system, an additional round of passive indoor air sampling will be conducted using the Radiello RAD 130 sampler as described above to confirm the effectiveness of the mitigation system. Note that if indoor air concentrations are detected above Tier 2, response actions (mitigation and confirmation) will be implemented on an expedited schedule. If indoor air

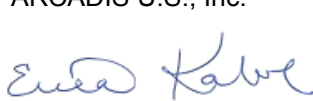
concentrations are detected above Tier 3, response actions will be implemented on an urgent schedule.

Following installation of the mitigation system (if required), an interim mitigation and monitoring plan, consisting of periodic checks to confirm fan operations, will be implemented.

If you have any questions or comments, please contact Erica Kalve at 415.491.4530 ext. 22.

Sincerely,


ARCADIS U.S., Inc.



Erica Kalve, P.G.
Senior Geologist



Hannah Rollins
Environmental Scientist



Leigh Neary
Environmental Engineer

Copies:

Ms. Melanie Morash, USEPA
Mr. Edgard Bertaut, TDY
Mr. Rick Podlaski, Thermo Fisher Scientific Inc.
Mr. Don Bradshaw, PG, ARCADIS
Ms. Amy Goldberg Day, ARCADIS
Ms. Lauren Mancuso, Union Pacific Railroad

Attachments:

Figure 1	Site Vicinity Map and Property Locations
Figure 2	Site Map Showing Residential Buildings in the Expanded Off-Property Study Area
Figure 3	Pre-ERD and Post-ERD Comparison TCE Distribution in Shallow Groundwater
Figure 4	TCE Distribution in Shallow Groundwater – Fourth Quarter 2013
Figure 5	Decision Flow Chart – Residential Buildings in the Expanded Off-Property Study Area
Attachment A	Vapor Intrusion Mitigation Fact Sheet
Attachment B	DTSC Building Survey and Screening Forms

References:

ARCADIS. 2010. Work Plan to Evaluate Potential Vapor Intrusion in the Off-Property Study Area and at 1250 West Middlefield Road, Teledyne Semiconductor and Spectra-Physics Lasers, Inc., Sites, Mountain View, CA. September 24.

ARCADIS. 2013. Focused Feasibility Study, Former Spectra-Physics Lasers, Inc., and Former Teledyne Semiconductor Facilities, Mountain View, California. April 4.

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ARCADIS. 2014b. Vapor Intrusion Mitigation Fact Sheet. Former Teledyne Semiconductor & Spectra-Physics Lasers, Inc. Sites. Mountain View, California. April.

ATSDR. 2013. Minimum Risk Levels List. Available at:
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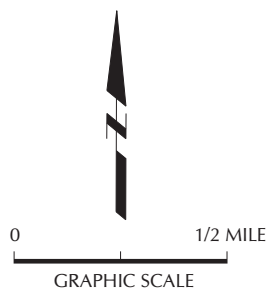
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http://www.dtsc.ca.gov/AssessingRisk/upload/Final_VIG_Oct_2011.pdf. October.

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USEPA. 2014a. Regional Screening Levels for Chemical Contaminants. Available at:
<http://www.epa.gov/region9/superfund/prgl/>. Revised May 2014.

USEPA. 2014b. Memorandum from Enrique Manzanilla to Region 9 Superfund Division Staff and Management. "EPA Region 9 Response Action Levels and Recommendations to Address Near-Term Inhalation Exposures to TCE in Air from Subsurface Vapor Intrusion." July 9.

Figures




SOURCE: THOMAS BROS GUIDE


FORMER SPECTRA-PHYSICS LASERS AND
FORMER TELEDYNE SEMICONDUCTOR SITES
MOUNTAIN VIEW, CALIFORNIA


SITE VICINITY MAP AND PROPERTY LOCATIONS



FIGURE
1


 RESIDENTIAL BUILDING INCLUDED IN THE ORIGINAL STUDY AREA

 RESIDENTIAL BUILDING INCLUDED IN THE EXPANDED OFF-PROPERTY STUDY AREA

 TCE ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)



0 200 400 600

 Feet

FORMER SPECTRA-PHYSICS LASERS AND
FORMER TELEDYNE SEMICONDUCTOR SITES
MOUNTAIN VIEW, CALIFORNIA

**SITE MAP SHOWING
RESIDENTIAL BUILDINGS
IN THE EXPANDED
OFF-PROPERTY STUDY AREA**



FIGURE
2



LEGEND

● MONITORING WELL INCLUDED IN SAMPLING EVENT

S-3
12/14/2010 0.0009

WELL IDENTIFICATION

TCE CONCENTRATION RESULTS (mg/L)

SAMPLE DATE

TCE TRICHLOROETHENE

< CONCENTRATION NOT DETECTED

ABOVE LABORATORY DETECTION LIMIT

ND NON DETECT

ERD ENHANCED REDUCTIVE DECHLORINATION (2011-2014)

mg/L MILLIGRAMS PER LITER

> GREATER THAN

= EQUAL TO

CONTOUR CONCENTRATION VALUES

> OR = 5.0 mg/L

> OR = 0.500 mg/L

> OR = 0.050 mg/L

> OR = 0.005 mg/L

0 250 500 Feet

FORMER SPECTRA-PHYSICS LASERS AND FORMER TELEDYNE SEMICONDUCTOR SITES
MOUNTAIN VIEW, CALIFORNIA

**PRE-ERD AND POST-ERD
COMPARISON OF TCE DISTRIBUTION
IN SHALLOW GROUNDWATER**

FIGURE 3



LEGEND

● MONITORING WELL

— TCE ISOCONCENTRATION CONTOURS
(DASHED WHERE INFERRED;
CONCENTRATIONS IN MICROGRAMS
PER CUBIC LITER)

TCE TRICHLOROETHENE

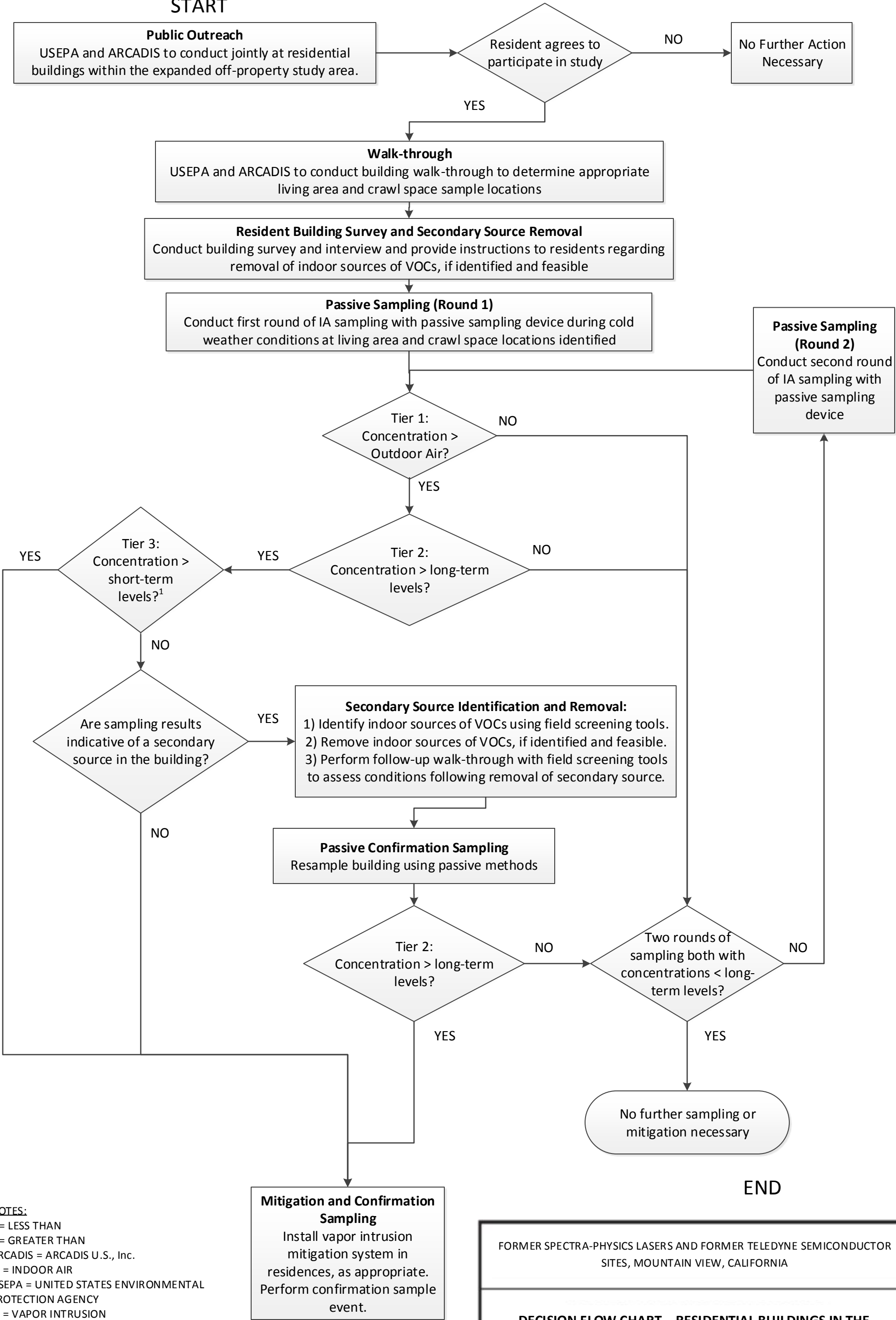
0 600 1,200 Feet

FORMER SPECTRA-PHYSICS LASERS AND
FORMER TELEDYNE SEMICONDUCTOR SITES
MOUNTAIN VIEW, CALIFORNIA

**TCE DISTRIBUTION IN SHALLOW
GROUNDWATER - FOURTH QUARTER 2013**

**FIGURE
4**

START



NOTES:
< = LESS THAN
> = GREATER THAN
ARCADIS = ARCADIS U.S., Inc.
IA = INDOOR AIR
USEPA = UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
VI = VAPOR INTRUSION
VOCs = VOLATILE ORGANIC COMPOUNDS

1. IF CONCENTRATIONS EXCEED TIER 3 CRITERIA, MITIGATION ACTIVITIES WILL BE EXPEDITED.

FORMER SPECTRA-PHYSICS LASERS AND FORMER TELEDYNE SEMICONDUCTOR SITES, MOUNTAIN VIEW, CALIFORNIA

DECISION FLOW CHART – RESIDENTIAL BUILDINGS IN THE EXPANDED OFF-PROPERTY STUDY AREA



FIGURE

5

Attachment A

Vapor Intrusion Mitigation Fact
Sheet

VAPOR INTRUSION MITIGATION FACT SHEET

Former Teledyne Semiconductor & Spectra-Physics Lasers, Inc. sites – Mountain View, California

April 2014

A Guide to Vapor Intrusion Mitigation

TDY Industries, LLC., for the former Teledyne Semiconductor Site and Thermo Fisher Scientific, Inc. for the former Spectra-Physics Lasers, Inc. Site, located respectively at 1300 Terra Bella Avenue and 1250 West Middlefield Road in Mountain View, California, are working with the United States Environmental Protection Agency (USEPA) to complete investigation and mitigation activities related to the former Sites located in Mountain View, California. Air samples were collected from the indoor air within your home. The crawl space air below your home was also sampled. Trichloroethene (TCE), a volatile organic compound (VOC), was detected in one or both of these air samples at concentrations that were above the USEPA Region 9 Regional Screening Levels (Action Levels) for air. Therefore, USEPA recommends mitigation. This fact sheet describes the mitigation system and the steps that, with your permission, will be taken to design and install the mitigation system in your home.

Contact Information

Erica Kalve
Project Manager
ARCADIS
Erica.Kalve@arcadis-us.com
(415) 491-4530, Ext. 22

For more information on vapor intrusion and mitigation, please visit U.S. EPA's website:

<http://www.epa.gov/oswer/vaporintrusion/>

What is an Active Mitigation System?

A mitigation system is designed to prevent vapors from below your home from entering the indoor air within your home. This is done by creating a negative pressure (vacuum) below your home. In order to accomplish this, piping is installed below a liner placed in the crawlspace. The piping is connected to a fan that discharges the vapors above the roofline of the home. See the figures below.

Typically one extraction point will be sufficient to create the required negative pressure across the entire foundation of the home. In some cases, more extraction points may be necessary.

Installation Process

The mitigation system will be designed by ARCADIS U.S., Inc. (ARCADIS), who will also direct and oversee a subcontractor conducting the installation work. By signing the access agreement provided to you for this work, you will be allowing ARCADIS to contact you to complete the following activities at times convenient to you and your household's schedule:

1. An initial design visit will be completed by ARCADIS to develop plans for installing the mitigation system components in your home. During this visit the proposed location of the mitigation piping will be identified.

Piping may either be installed from the crawl space through an opening and up the outside of the home to the discharge point located above the roof (Design A or Design B; shown on the following page), or up through the garage (Design C; shown on the following page). The corresponding location of the fan will be on the piping outside of the home or in the garage. This initial visit will take approximately 1 to 3 hours.

2. The installation of the mitigation system will be conducted on days that are acceptable to you. An ARCADIS team member will accompany the installation contractor and facilitate the installation of the mitigation system per the ARCADIS design. The installation is expected to take approximately 3 to 4 days.

3. Air sampling will be conducted approximately 30 days following the system installation to verify that TCE concentrations in indoor air are below the Action Levels. If needed, system adjustments will be made.

(Continued from front)

4. In the case that the active mitigation system does not reduce indoor air concentrations of TCE below the USEPA action level, ARCADIS will further investigate potential pathways and sources of the TCE. These investigations may include, but are not limited to, an evaluation of cleaning products stored on the property and air sampling below the slab of the garage ("sub-slab sampling"). In the case that sub-slab sampling is necessary, a utility clearance check will be completed, a small sample point will be installed in the garage floor and a sample will be collected and analyzed for VOCs. Once the sample is collected, the slab would be repaired.

5. An annual inspection will be conducted by ARCADIS to ensure the system is functioning properly. Additional visits will be scheduled, if needed.

During system installation, some minimal noise should be expected. The installation contractor is a licensed and insured contractor and will perform all work in compliance with local code requirements. The installation will be conducted at no cost to you.

Health and Safety

TDY Industries, LLC, Thermo Fisher Scientific, Inc., and ARCADIS are committed to the safety of our neighbors and the workers that will be performing the work inside your home. All work has and will be conducted in a safe manner that follows a Health and Safety Plan and other detailed plans prepared specifically for this project. Throughout the installation process, ARCADIS and their subcontractors will work closely with you to safely complete the work and limit disruptions.

For more information or to have questions and concerns addressed, please contact ARCADIS or the USEPA as listed on the front page.

Information for Residents

During the design visit, the ARCADIS team member will review the mitigation system design with you. Aesthetics and your preferences will be considered as much as possible in the location of the system components. Note that some preferences may affect functionality or durability and may not be able to be incorporated.

During system installation, some minimal noise should be expected. The installation contractor is a licensed and insured contractor and will perform all work in compliance with local code requirements.

The installation will be conducted at no cost to you.

Operation of the Mitigation System

The mitigation system utilizes an electric powered fan. The fan is designed to have a low energy usage. The energy usage will be calculated and local electric rates will be used to generate the cost associated with operation of the fan.

You will be paid for the fan's calculated electric usage. Usage payments will be issued annually and will continue until the system is no longer necessary.

The mitigation system will be installed with an audible alarm. If the system fan stops or the system is not creating adequate vacuum, the alarm will sound. If the system alarm sounds, contact the phone number listed on the system label and the necessary repairs will be made at no cost to you.

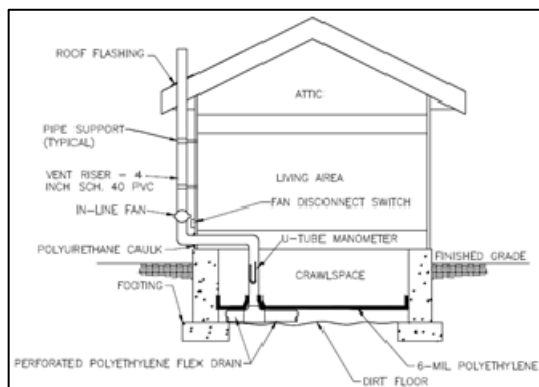
You may note that other homes in your neighborhood do not have mitigation systems. Not all homes were tested and not all homes had readings that exceeded USEPA's recommended level for vapors.

Decommissioning of the Mitigation System

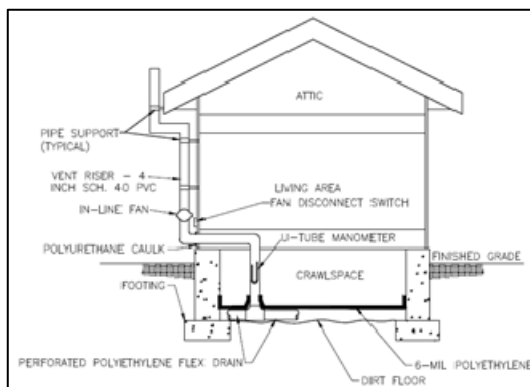
The ongoing groundwater remediation in the area is reducing the TCE concentrations in groundwater and will reduce the TCE present in the soil vapor beneath your home. When it is determined that the vapor levels of TCE are below the USEPA criteria for mitigation, the operation of the mitigation system will no longer be necessary. A confirmation sampling event will be completed to confirm that the mitigation system is no longer needed to reduce TCE concentrations in your home to below the USEPA Action Levels. At that time, you will be notified and will be presented with the following options:

1. The homeowner may choose to continue to operate the system; however, the electricity cost and any maintenance will be the homeowner's responsibility.
2. The homeowner may choose to turn off the system and leave it in place.
3. The homeowner can request that the system be removed, and it will be removed at no cost to the homeowner.

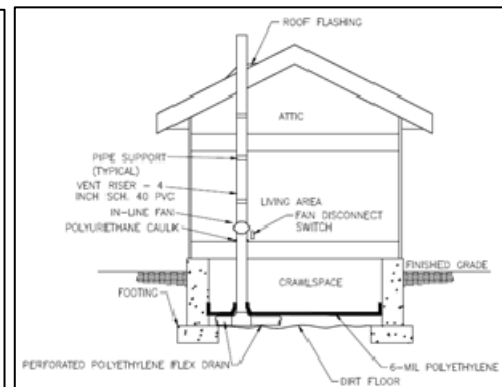
Example of typical mitigation system components



Design A



Design B



Design C

Attachment B

DTSC Building Survey and
Screening Forms

APPENDIX L - BUILDING SURVEY FORM

Preparer's Name: _____ Date/Time Prepared: _____
Affiliation: _____ Phone Number: _____

Occupant Information

Occupant Name: _____ Interviewed: ☐ Yes ☐ No
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Phone: _____ Email: _____

Owner/Landlord Information (Check if same as occupant ☐)

Occupant Name: _____ Interviewed: ☐ Yes ☐ No
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Phone: _____ Email: _____

Building Type (Check appropriate boxes)

☐ Residential ☐ Residential Duplex ☐ Apartment Building ☐ Mobile Home ☐ Commercial (office)
☐ Commercial (warehouse) ☐ Industrial ☐ Strip Mall ☐ Split Level ☐ Church ☐ School

Building Characteristics

Approximate Building Age (years): _____ Number of Stories: _____
Approximate Building Area (square feet): _____ Number of Elevators: _____

Foundation Type (Check appropriate boxes)

☐ Slab-on-Grade ☐ Crawl Space ☐ Basement

Basement Characteristics (Check appropriate boxes)

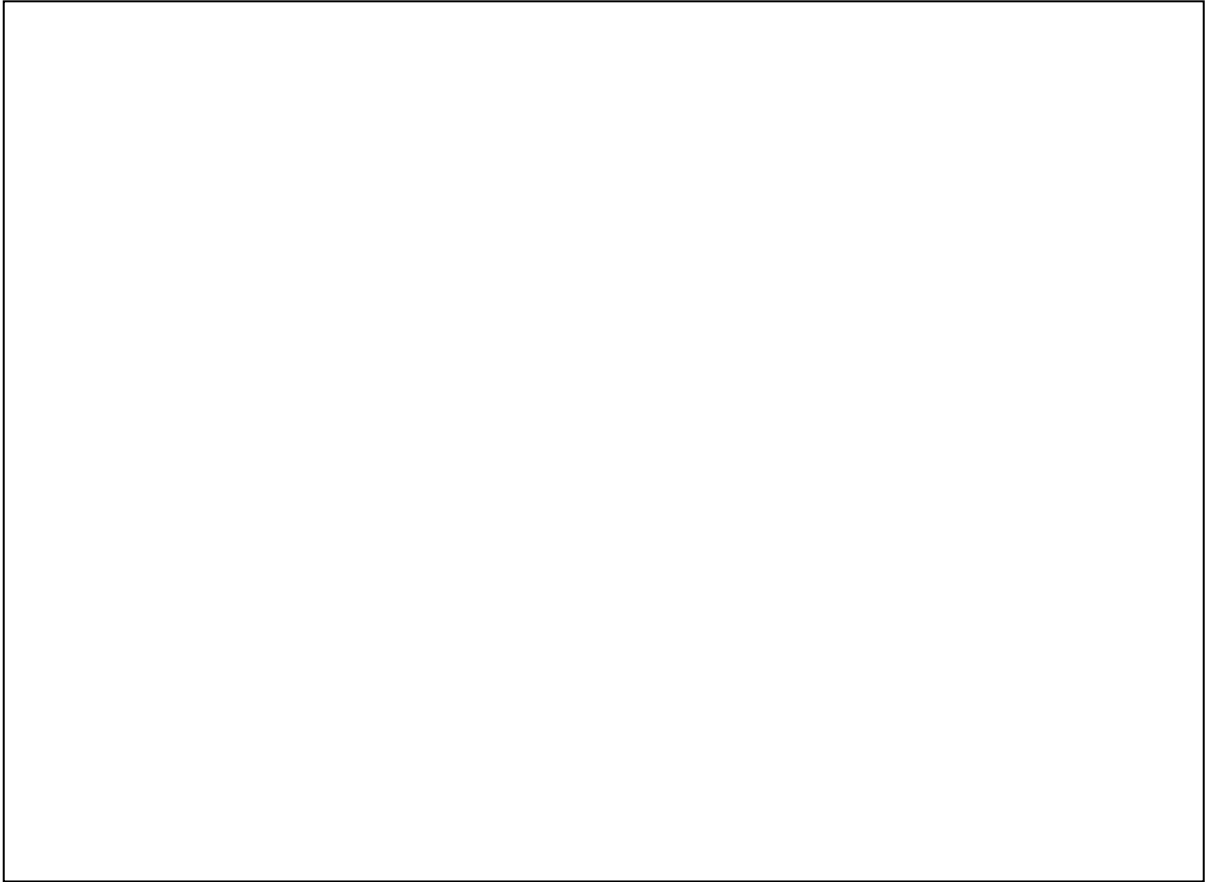
☐ Dirt Floor ☐ Sealed ☐ Wet Surfaces ☐ Sump Pump ☐ Concrete Cracks ☐ Floor Drains

Factors Influencing Indoor Air Quality

Is there an attached garage?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is there smoking in the building?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is there new carpet or furniture?	<input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____
Have clothes or drapes been recently dry cleaned?	<input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____
Has painting or staining been done with the last six months?	<input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____
Has the building been recently remodeled?	<input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____
Has the building ever had a fire?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is there a hobby or craft area in the building?	<input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____
Is gun cleaner stored in the building?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is there a fuel oil tank on the property?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is there a septic tank on the property?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Has the building been fumigated or sprayed for pests recently?	<input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____
Do any building occupants use solvents at work?	<input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____

Sampling Locations

Draw the general floor plan of the building and denote locations of sample collection. Indicate locations of doors, windows, indoor air contaminant sources and field instrument readings.



Primary Type of Energy Used (Check appropriate boxes)

☐ Natural Gas ☐ Fuel Oil ☐ Propane ☐ Electricity ☐ Wood ☐ Kerosene

Meteorological Conditions

Describe the general weather conditions during the indoor air sampling event.

General Comments

Provide any other information that may be of importance in understanding the indoor air quality of this building.

APPENDIX M – BUILDING SCREENING FORM

Occupant of Building _____

Address _____

City _____

Field Investigator _____ Date _____

Field Instrument Reading	Measurement Location (Ambient Air, Foundation Opening, or Consumer Product)	If Consumer Product, Potential Volatile Ingredients

Comments:
